2018 Utility Allowance Methodology

Summary

The utility allowance is based on both the consumption and rates of utilities. Utility consumption data is supplied by HUD's Utility Schedule Model, while utility rate data is collected by THDA. Utility allowance adjustments are made if the projected monthly expenditure for a utility increased or decreased 10% or more from the previous year. The utility allowance remains the same as the previous year's utility rate if the increase or decrease in rates is below 10%. The cost of utilities is calculated for electricity, natural gas, liquified petroleum gas (propane), water, wastewater and trash.

This year, THDA collected information on the primary utility providers serving the county seats of each county. May 2018 rates (and seasonal rates, if available) from each provider were used to determine the average monthly consumption cost for each utility. Monthly consumption costs were calculated using HUD's Utility Schedule Model. Updates to the 2018 utility allowances were made when the average cost of the current rates increased or decreased 10% or more from the 2017 rates. Additional information on the HUD Utility Schedule Model can be found on the following HUD website. http://www.huduser.org/portal/resources/utilallowance.html.

Electricity

Electricity rates are collected along with customer service fees and the TVA Fuel Cost Adjustment (FCA). FCA is the mechanism TVA uses to help recover largely uncontrollable fuel and purchased power costs. A variety of factors affect these costs, including weather and global supply and demand issues.

As was the case in 2015, 2016, and 2017, the OMB-Approved format for 2018 did not include the two distinct categories of electric heating that were featured in 2014 (Electric Resistance & Electric Heat Pump). Therefore the 2018 Utility Allowances use the lone field ("Oil/Electric") seen in previous years. This field is calculated using electric rates only; no oil prices factor into the calculation.[1]

Natural Gas

Natural gas rates are collected along with customer service fees and the Purchase Gas Adjustment (PGA). A detailed explanation of the PGA can be found on the following American Gas Association website. http://www.aga.org/our-issues/issuesummaries/Pages/PurchasedGasAdjustments.aspx. If the natural gas provider utilizes seasonal rates, the weighted average of the rates was used to determine the average consumption cost.

[1] For a handful of counties, the HUD Utility Schedule projected monthly electric space heating costs that decreased slightly from zero to five bedroom units for manufactured homes only. Because of the structure of certain electric rates and means by which electric space heating is computed within the HUD model, this was not a computational error but rather a quirk of the model. For the majority of counties in Tennessee, the HUD model projected an increase of roughly 2.5 percent for each additional bedroom in a manufactured home, and the outlier counties' allowances were adjusted manually to mirror this.

Liquefied Petroleum Gas (Propane)

Liquefied Petroleum Gas rates were calculated based on the national average and a sample of state rates. Based on the threshold of 10 percent change, propane prices did not change enough from 2017 to 2018 to warrant a change in their allowances. To view the progression of propane prices over time, visit the following link from the U.S. Energy Information Administration: http://www.eia.gov/petroleum/heatingoilpropane/. Weekly updates run until the end of heating season, meaning the propane price used was from the last week of March 2018.

Water and Wastewater

Water and Wastewater rates were collected along with customer service fees and applicable taxes. In 2016, HUD significantly revised its water and wastewater consumption estimates, greatly affecting the allowance amounts. These revised estimates remained in the 2018 model as well.

The utility model's projections for household water and wastewater usage are identical, and are uniform regardless of location. With this in mind, the 2015 and 2016-18 household water consumption projections are listed side-by-side for comparison.

2015 Water Usage

0 bedrooms: 4,680 gallons
1 bedrooms: 5,200 gallons
2 bedrooms: 6,800 gallons
3 bedrooms: 8,400 gallons
4 bedrooms: 10,000 gallons
5 bedrooms: 11,600 gallons

2016-2018 Water Usage

0 bedrooms: 3,438 gallons
1 bedrooms: 3,820 gallons
2 bedrooms: 6,367 gallons
3 bedrooms: 10,188 gallons
4 bedrooms: 14,008 gallons
5 bedrooms: 17,829 gallons

Household usage of water and sewer, then, is now 54 percent higher for a 5 bedroom unit than it was two years ago, and 40 percent for a 4 bedroom unit. Conversely, estimated water usage has been revised downwards for 0 to 2 bedroom units.

The best way to explain this change is that the 2016-18 versions of the HUD model project that a 5 bedroom unit holds, on average, 7 residents, and a 4 bedroom unit holds, on average, 5.5 residents. Previously there had been no such assumption; in 2015, the per-person gallon estimate was simply multiplied by the number of bedrooms. Incidentally, the per-person gallon estimate was lowered in 2016 and 2017, based on the HUD model's usage of the Tennessee state average (rather than the U.S. average used in 2015).

Trash

In most cases, a monthly flat fee is charged for trash service. If provider information was unavailable for a specific county, data from TNHousingSearch.org was used. Based upon provider rates and TNHousingSearch.org data, a state average was calculated and used for counties where no data were available. The 2018 state average was higher than the previous year, resulting in an increase in trash allowances for the majority of Tennessee counties.

Range/Microwave and Refrigerator Fees

To determine the range and refrigerator fees for 2017, data was collected from online ads across the state. An average price was calculated from the data for each appliance and then divided by twelve to determine the monthly fee.